#### PE TITLE: Combat Survivor Evader Locator (CSEL) DATE RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) February 1999 BUDGET ACTIVITY PE NUMBER AND TITLE **PROJECT** 5 - Engineering and Manufacturing Development 0305176F Combat Survivor Evader Locator 4522 (CSEL) FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 Cost to **Total Cost** COST (\$ In Thousands) Actual Estimate Estimate Estimate Estimate Estimate Estimate Estimate Complete 4522 CSAR EMD 7,966 0 13,412 10,507 0 71,773 0 0 Quantity of RDT&E Articles 0 (U) A. Mission Description (U) The Combat Survivor Evader Locator (CSEL) is a joint program, with the Air Force as lead Service, that will provide enhanced Combat Search and Rescue (CSAR) communications and location capability by replacing antiquated survivor radios (PRC-90/112) with current and emerging technologies in a new end-to-end system. The CSEL system will be used by all the Services and DoD, and potentially non-DoD government agencies. CSEL system features include a new hand held radio which incorporates two-way, secure over-the-horizon (OTH) messaging, line-of-sight (LOS) voice, near real-time geopositioning, verification of evader identity and condition, low probability of intercept/detection (LPI/LPD), and the potential integration of commercial satellite systems capabilities. (U) FY 1998 (U) \$ 3,851 CSEL Engineering and Manufacturing Development (U) \$ 1,561 Government Test and Operational Assessment Other Government Support (U) \$ 2,554 Total (U) \$ 7,966

- (U) FY 1999
- (U) \$ 0 Not Applicable (Note 1)
  - (U) <u>FY 2000</u>
- (U) \$ 11,235
   CSEL Engineering and Manufacturing Development
- (U) \$ 150 Government Test and Operational Assessment
- (U) \$ 2,027 Other Government Support
- (U) \$ 13,412 Total

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| R  | February 1999  |  |              |
|--|--|--|--------------|
| BUDGET ACTIVITY <b>5 - Engineering</b>                                   | and Manufacturing Development  | PE NUMBER AND TITLE  0305176F Combat Survivor Evader Lo (CSEL) | PROJECT 4522 |
| (U) <u>FY 2001</u><br>- (U) \$ 6,533<br>- (U) \$ 1,176<br>- (U) \$ 2,798 | CSEL Engineering and Manufacturing Development<br>Government Test and Operational Assessment<br>Other Government Support |  |              |

Note 1: The AF plans to reprogram \$3.999M into the CSEL program in FY99 to continue development of the CSEL system.

#### (U) B. Budget Activity Justification:

(U) \$ 10,507

This program is in Budget Activity (BA) 5, Engineering and Manufacturing Development (EMD) because it is in engineering and manufacturing development and has not received full-rate production approval.

T-4-1

### (U) C. Program Change Summary (\$ in Thousands)

Total

|  |         |         |         |         | 1 otal  |
|--|---------|---------|---------|---------|---------|
|  | FY 1998 | FY 1999 | FY 2000 | FY 2001 | Cost    |
| (U) Previous President's Budget: FY1999 PB                         | 3,994   | 0       | 0       | 0       | 47,853  |
| (U) Appropriated Value   | 4,315   | 0       |         |         |         |
| (U) Adjustments to Appropriated Value                              |         |         |         |         |         |
| a. Cong Gen Reductions   | -262    |         |         |         |         |
| b. SBIR  | -59     |         |         |         |         |
| <ul> <li>c. Omnibus and Other Above Threshold Reprogram</li> </ul> | -27     |         |         |         |         |
| d. Below Threshold Reprogramming                                   | 3,999   |         |         |         |         |
| (U) Adjustments to Budget Years since FY1999 PB                    |         |         | +13,412 | +10,507 | +23,919 |
| (U) Current Budget Submit (FY2000 PB)                              | 7966    | 0       | 13,412  | 10,507  | 71,772  |
|  |         |         |         |         |         |

<sup>(</sup>U) Significant Program Changes: \$3,999K BTR planned to be added to the program in FY99 to continue engineering and manufacturing development of the hand held radio components. Technical and schedule delays plus new requirements for Demand Assigned Multiple Access (DAMA) compatibility and Defense Information Infrastructure Common Operating Environment (DII COE) level 7 compliance required RDT&E extension into FY 2002, along with additional new funding requirements to complete the EMD program. Funding was transferred from program procurement in FY00/01 to complete the RDT&E.

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|   |  | DATE February 1999                            |  |  |  |  |
|---|--|---|--|--|--|--|
| BUDGET ACTIVITY 5 - Engineering and Manufacturing Development | PE NUMBER AND TITLE 0305176F Combat Survi (CSEL) | R AND TITLE 6F Combat Survivor Evader Locator |  |  |  |  |
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| RDT&E BUDGET IT  | EM JUS           | STIFICA          | TION SI        | HEET (R  | R-2 Exhil        | oit)             |                   | DATE <b>Fe</b>   | bruary 19                   | 99                         |
|--|------------------|------------------|----------------|--|------------------|------------------|-------------------|------------------|-----------------------------|----------------------------|
| 5 - Engineering and Manufacturing Development 0  |                  |                  | 030            | PE NUMBER AND TITLE  0305176F Combat Survivor Evader Lo (CSEL) |                  |                  |                   | PROJECT 4522     |                             |                            |
| (U) D. Other Program Funding Summary (\$ in  | Thousands        | <u>)</u>         | <del></del>    |  |                  |                  |                   |                  |                             |                            |
| (U) Other Procurement, Air Force (PE 0305176F) (BA 63, P-70)   | FY 1998<br>5,532 | FY 1999<br>2,992 | FY 2000<br>843 | FY 2001<br>3,567   | FY 2002<br>5,775 | FY 2003<br>5,909 | FY 2004<br>6,034  | FY 2005<br>6,170 | To <u>Compl</u><br>Continue | Total <u>Cost</u> Continue |
| (U) Related Activities: None   |                  |                  |                |  |                  |                  |                   |                  |                             |                            |
| (U) E. Acquisition Strategy: All major contracts within this Program Element   | were awarded     | l after full ar  | nd open con    | npetition.   |                  |                  |                   |                  |                             |                            |
| (U) F. Schedule Profile  |                  |                  |                |  |                  |                  |                   |                  |                             |                            |
| (U) Government DT/OA (U) Option 1 (First Unit) Delivery (U) Production Option 2 Award (OPAF) (U) Option 2 (First Unit) Delivery (U) Production Option 3 Award (OPAF) |                  | 83<br>*          | 1 <u>1</u>     | FY 1999<br>2 3<br>X  | 4 1 X            | FY 20<br>2       | 00<br>3<br>X<br>X | 1<br>X           | FY 2001<br>2 3<br>X         | 4                          |
| * = completed event X = planned event  |                  |                  |                |  |                  |                  |                   |                  |                             |                            |
| Project 4522   |                  |                  | Page 3 of      | <sup>c</sup> 5 Pages   |                  |                  | Exhib             | it R-2 (PE (     | )305176F)                   |                            |

| RD  | T&E PROG  | RAM ELE                               | MENT/P                               | ROJECT C                        | OST BR                            | EAKDO   | WN (R-         | 3)          | DATE <b>Febr</b> | uary 19 | 99                      |
|---|---|---------------------------------------|--------------------------------------|---------------------------------|-----------------------------------|---------|----------------|-------------|------------------|---------|-------------------------|
| BUDGET ACTIVITY <b>5 - Engineeri</b>  | ng and Manufa   | ecturing D                            | evelopme                             | nt                              | PE NUMBER A<br>0305176F<br>(CSEL) |         | at Survivo     | or Evader L | •                | PF      | ROJECT<br><b>522</b>    |
| (U) A. Project C  | ost Breakdown (\$ i                                     | n Thousands                           | <u>s)</u>                            |                                 |                                   |         |                |             |                  |         |                         |
|   |   |                                       |                                      | FY 1998                         | <u>FY 1</u>                       |         | FY 2000        | FY 200      |                  |         |                         |
|   | ering and Manufactu                                     |                                       | ment                                 | 3,851                           |                                   | 0       | 11,235         | 6,53        |                  |         |                         |
|   | est and Operational                                     | Assessment                            |                                      | 1,561                           |                                   | 0       | 150            | 1,17        | 76               |         |                         |
| (U) Program Offic   |   |                                       |                                      |                                 |                                   |         |                |             |                  |         |                         |
|   | Navy Ground Station                                     | n Integration a                       | and Support                          | 518                             |                                   | 0       | 240            | 86          |                  |         |                         |
| PRC/ARINC Co  |   |                                       |                                      | 460                             |                                   | 0       | 475            | 48          |                  |         |                         |
|   | E/Aerospace) Suppor                                     | rt                                    |                                      | 1,372                           |                                   | 0       | 1,062          | 1,20        |                  |         |                         |
| Space and Missi   | le Center   |                                       |                                      | 204                             |                                   | 0       | 250            | 25          |                  |         |                         |
| (U) Total   |   |                                       |                                      | 7,966                           |                                   | 0       | 13,412         | 10,50       | 07               |         |                         |
| Performing Orga Contractor or Government Performing Activity Product Developm | Contract<br>Method/Type or<br>Funding<br><u>Vehicle</u> | Award or<br>Obligation<br><u>Date</u> | Performing<br>Activity<br><u>EAC</u> | Project<br>Office<br><u>EAC</u> | Total<br>Prior to<br>FY 1998      | FY 1998 | <u>FY 1999</u> | FY 2000 1   | FY 2001          | ]       | Total<br><u>Program</u> |
| Boeing  | CPAF  | 23 Feb 96                             | 59,425                               | 59,425                          | 31,165                            | 3,851   | 0              | 11,235      | 6,533            |         | 52,784                  |
| SMC (COBRA)   | Multiple<br>gement Organization                         | Multiple<br>ons                       | 4,000                                | 4,000                           | 4,000                             | 0       |                | ŕ           | ŕ                | 0       | 4,000                   |
| Program Support Test and Evaluation   | on Organizations  |                                       |                                      |                                 | 3,991                             | 2,554   | 0              | 2,027       | 2,798            | 0       | 11,370                  |
| AFOTEC  | <u>,</u>  |                                       |                                      |                                 | 54                                | 250     | 0              | 0           | 0                | 0       | 304                     |
| 746TS   |   |                                       |                                      |                                 | 678                               | 1,311   | 0              | 150         | 1,176            |         | 3,315                   |
| Project 4522  |   |                                       |                                      | Daa                             | e 4 of 5 Pages                    |         |                | Evhil       | oit R-3 (PE 030  | )5176F) |                         |

| RDT&E PROGRAM ELEMENT/PROJE   | CT COST BR             | EAKDOW                  | /N (R-3     | )                      | DATE <b>Febru</b>       | uary 19                | 99                        |
|---|------------------------|-------------------------|-------------|------------------------|-------------------------|------------------------|---------------------------|
| BUDGET ACTIVITY 5 - Engineering and Manufacturing Development   | PE NUMBER AND TITLE    |                         |             |                        | •                       | PROJECT<br><b>4522</b> |                           |
| Government Furnished Property: Not Applicable. Subtotal Product Development Subtotal Support and Management Subtotal Test and Evaluations | 35,165<br>3,991<br>732 | 3,851<br>2,554<br>1,561 | 0<br>0<br>0 | 11,235<br>2,027<br>150 | 6,533<br>2,798<br>1,176 | 0<br>0<br>0            | 56,784<br>11,370<br>3,619 |
|   |                        |                         |             |                        |                         |                        |                           |
| Project 4522  | Page 5 of 5 Page       | s                       |             | Exhi                   | bit R-3 (PE 030         | 5176F)                 |                           |

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